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REMARKS ON THE COMPARATIVE VALUE OF THE DIFFERENT ANÆSTHETIC AGENTS.

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[Communicated for the Boston Medical and Surgical Journal.]

It is well known that sulphuric ether, chloroform and chloric ether when inhaled, will render most persons insensible to pain. Advantage has been taken of this to a great extent within the last three or four years in surgical and obstetric practice; and numerous operations, many of which were severe and protracted, have been performed with success in various parts of the civilized world, upon individuals in whom insensibility was in this way induced. That all these agents have this power, cannot be doubted; but it may be questioned whether all of them can be used with equal safety.

It is important to settle this point, if possible; and this can only be done by comparing the effects of these different articles on the system, when taken by inhalation. Numerous trials have been made of all of them, and the result carefully noted. By examining these and comparing them with each other, a correct opinion may perhaps be formed on the subject.

With a view of contributing something to this desirable result, I will state my own experience, premising that from the time the discovery of the anæsthetic power of sulphuric ether was made, to the present moment, I have had almost daily opportunities of seeing persons rendered insensible by one or other of the three articles that I have named. Upon many of these individuals I have operated myself, and upon others I have seen operations performed by other surgeons, either at the Massachusetts General Hospital or in private practice. My experience, therefore, is not inconsiderable.

I will briefly state what I consider to be the advantages and disadvantages of each of the anæsthetic agents, in the order in which I have named them.

1st. *Of Sulphuric Ether.*

The discovery of the anæsthetic power of sulphuric ether was made in Boston, U. S. of America, in the autumn of 1846. It was adminis-

tered by a dentist with success on the 30th of Sept. of that year, to a person from whom a tooth was extracted. On the 16th of October following it was inhaled by a patient at the Massachusetts Hospital, who was operated on by Dr. Warren; but complete insensibility was not produced; and the next day at the same institution I removed a tumor from the arm of a female, who was rendered unconscious and insensible by it, though the operation lasted seven minutes. At that time the precise nature of the article used was not known, except to those connected with its discovery.

Before the next operation, which I performed on the 7th of November, I was told what the agent was, by the dentist who had employed it for the extraction of a tooth. This operation was the amputation of the thigh of a female. It was done in the presence of two or three hundred spectators, and was entirely successful. The patient declared, before she was removed from the operating theatre, that she had been wholly unconscious and insensible till the very close of the operation. She suffered but little after, and though much reduced at the time, from long-continued disease and severe suffering, she recovered rapidly and now enjoys good health.

There was no doubt in the minds of those who were present on this occasion, of the wonderful powers of ether; yet every one felt that much was to be learned as to the safety of its administration, the best mode of doing it, and the extent to which it might be carried. From that day, however, its use rapidly spread throughout the civilized world, and within a few months, operations were performed on patients under its influence in the four quarters of the globe. It is remarkable that the only spot in Christendom in which the discovery was received with coldness, and where no disposition was shown to test its merits by fair experiment, was in our own country, and in cities, too, which have heretofore been foremost among us in their efforts to advance the cause of medical science.

The course of the scientific men of Europe was widely different. They subjected it to the most rigid scrutiny, and satisfied themselves by well-conducted experiments, not only that all that had been said of it was true, but "that the half had not been told them."

It is gratifying to be able to add that after countless trials of the powers of ether on the human system made in Europe under the direction of some of the most accomplished professional men living, nothing was added to what was already known in this country, as to its effects or the best mode of exhibiting it.

I have said that the discovery of the anæsthetic power of sulphuric ether was made in Boston in the year 1846; and I can add that it was there carried to its present condition by the judicious and honorable course of the members of our profession in relation to it. I am aware that, since that time, several individuals have come forward and declared that they had at an earlier date used it in the same way, for the same purpose, and with the same good results. If they had done so, the world were none the wiser or better for it; and I cannot forbear adding, that it is utterly inconceivable to me, that any one who has witnessed its

successful effects in a surgical operation, could be so regardless of human suffering and so indifferent to his own fame, as not to have promulgated them far and wide.

When sulphuric ether was first administered by inhalation, it was by means of a pretty formidable-looking and expensive apparatus. Various instruments for this purpose were constructed, both in this country and Europe. The same objections applied to all of them. They were so formed as to create a well-founded apprehension that the supply of atmospheric air would not in every case be sufficient. It was difficult to guard against this; and from this cause, some patients, soon after the discovery was made, nearly lost their lives by asphyxia.

Besides, to use them with entire success required, in a greater or less degree, the coöperation of the individual to whom the ether was administered. This of course could not always be had, and the consequence was that very frequently a sufficient degree of insensibility was not produced, and even when it was, it could not be kept up as long as in many cases was desirable.

The cost of the apparatus, too, was a serious objection, though a vastly less important one than either of the others that I have named. At the same time it was so great, that if some simpler and less expensive mode of administering ether had not been found, it may well be doubted whether the benefits of the discovery would have been as rapidly and extensively diffused as they have been.

But all these objections are entirely obviated by the use of a bell-shaped sponge of fine texture. This should be large enough to cover the nose and mouth. The patient is required to do nothing. The apparatus is simple and not costly.

This mode was adopted at the Massachusetts Hospital in a few months after the first use of ether there by inhalation; I am not aware that it was previously used anywhere else, and I presume that it is now the only method by which ether is inhaled.

The quantity necessary to produce the desired effect must vary in different cases. In surgical operations, requiring from five to ten minutes for their performance, from three to six ounces is usually sufficient. The ether, however, should be of the purest kind, that is the rectified, which has undergone a second distillation, by means of which it parts with a considerable portion of its alcohol. Yet a much greater quantity than what has been named can be used with perfect safety, and the patient may be kept for a much longer time under its influence without danger, by occasionally removing the sponge, and re-applying it when he gives signs of returning sensibility.

By administering it gradually, many unpleasant effects are avoided. The great irritation of the larynx and air passages, accompanied by urgent and convulsive cough, is in most cases entirely prevented. The vapor of the ether should be so mixed with atmospheric air, that respiration should be neither laborious nor painful. The irritability of the parts with which the ether comes in contact is by degrees overcome, and then the sponge may be applied directly to the face, and if necessary compressed in some measure so as to exclude to a greater degree the atmos-

pheric air. When the desired effect is produced, which is usually in from three to five minutes, the patient has no control over the voluntary muscles; he cannot speak; he cannot open his eyes, when directed to do so; his muscles become completely relaxed, and the pulse, which at the beginning of the inhalation is frequent and often rises during the process to 140 beats in a minute or more, becomes slower, and I have very often known it to fall to 60. The patient is then insensible and unconscious, and the surgeon may begin his operation with great confidence that he will inflict no suffering. The sponge should then be removed, and re-applied from time to time as circumstances may require. If the ether is not pure, longer time is necessary to produce the desired effect; the brain and nervous system are more excited, and the patient is occasionally violent for a time and with difficulty controlled.

Before using the ether the sponge should be dipped in warm water, and then strongly compressed, leaving it slightly damp. The evaporation seems to go on better in this way than when a sponge is used that has not been previously moistened. In the first instance, the ether should be poured on the inside of the sponge; about two ounces is enough; when more is required, it should be applied to the outside, as it is best not to remove the sponge from the face.

Sulphuric ether of a proper quality used in this way, I am confident, is perfectly safe, and will in almost every instance produce the desired effect. I have administered it to persons of all ages, of every variety of constitution, and in almost every state of the system, and I have never known in a single instance a fatal or alarming result. I have given it to infants of seven weeks old, and to individuals of 75 years, with entire success. I have administered it to persons suffering under chronic pulmonary disease, not only without injury, but in some cases with decided benefit. It is well known that it often gives relief in catarrhal affections of the lungs and in paroxysms of asthma. In fact, I hardly know a state of the system in which I should be deterred from using it, if I were called upon to perform a surgical operation.

The advantages, then, of sulphuric ether as an anæsthetic agent, are its entire safety, the ease with which it is administered, and the slight inconvenience which follows its administration. I have already stated that I have never known its inhalation followed by a fatal or alarming effect, and there is reason to doubt whether death has in a single instance been produced by it, when it has been properly administered. One patient is said to have lost his life by its inhalation at the Hospital in Auxerre, in France. This took place in August, 1847. The details of the case are not given with such minuteness as to enable any one to form a satisfactory opinion. It occurred, however, not long after the discovery; before the best mode of exhibiting it was adopted, and the *post-mortem* appearances indicated, as far as any opinion could be formed from them, that death was caused by asphyxia. In a careful examination of some of the leading medical journals of Europe and this country, published during the last three years, I have not been able to find another case in which life was destroyed by the inhalation of sulphuric ether, and there is reason to believe, as I have already intimated, that death

would not have taken place in this instance, if the lungs had been abundantly supplied with atmospheric air. It is only wonderful that an agent of such power, used as it often has been in the most reckless manner, by unskilful and ignorant persons, should not have caused far more disastrous results, than any that have hitherto been made known. It teaches us that though it should be used with caution and confided only to skilful hands, the dangers from its use are far less than our preconceived opinions had led us to believe.

The great ease with which it can be administered is not to be overlooked in estimating its advantages. No complicated apparatus is required, and no coöperation of the patient is necessary. A simple sponge, moistened with sulphuric ether and held before the face for two or three minutes, will in almost every instance produce the desired effect.

There are no ill consequences from its use. If it be breathed only for a short time, its effects usually pass off in a few minutes. I have never known them to continue for more than an hour; and in this case the patient had been kept under its influence for forty-five minutes. Nausea and vomiting are not frequent, unless it is inhaled soon after food has been taken. I have not seen convulsions follow its exhibition, nor any delirium, except a slight and transitory kind, such as arises from intoxicating liquors. I confess that I was much surprised to learn, by carefully watching its effects, to what a small extent and for how short a time it disturbed the functions of the nervous system, and how rare it was to find headache among the consequences of its inhalation.

If, however, the state of narcotism should continue longer than is necessary for the purposes for which it was produced, the means that seem to me the most likely to remove it, are the dashing of cold water in the face; the application of strong stimulants, as the carbonate of ammonia, to the nose; and, as soon as the patient can swallow, the administration of a small quantity of hot spirit and water. The object is to increase the action of the heart, so that the blood may circulate more rapidly through the lungs, and thus be enabled to part with the vapor of the ether that is mixed with it. When narcotism arises from any noxious substance taken into the stomach, we adopt means to empty that organ as soon as possible by the stomach pump or an emetic. The principle of the treatment in the two cases is the same; the object being in both to remove the cause of the peculiar state of the system under which the patient is laboring.

The only objections of which I am aware to sulphuric ether as an anæsthetic agent, are its pungent odor, which is offensive to some persons, and the no inconsiderable degree of irritation which its inhalation occasionally produces in the air passages. This irritation, I am confident may be in great measure prevented by proper attention to the mode of its exhibition and the quality of the article used. Admitting these objections to be as great as they have been said to be by those who have urged them with the most earnestness, they do not in my opinion counterbalance the advantages; and I have no hesitation in saying that I should give it the preference over any other article with which I am acquainted, that is used for the purpose of producing insensibility.

2d. *Of Chloroform.*

Chloroform is the perchlorid of formyle, the radicle of formic acid. It has been ascertained by Dumas to consist of three parts of chlorine to one of the bi-carburet of hydrogen [formyle]. It was discovered almost simultaneously nearly twenty years since in France, Germany, and this country.

It was first employed as an anæsthetic agent by Professor Simpson, of Edinburgh, and he thought that it possessed "various important advantages" over sulphuric ether. He says that "it is far more portable; more manageable and powerful; more agreeable to inhale; is less exciting than ether; and gives us far greater control and command over the superinduction of the anæsthetic state." If all this were true, it would no doubt be preferable to any other agent with which we are acquainted. But subsequent experience proves that it is not so.

Its only advantages are that it is more agreeable to inhale than ether, and that a less quantity of it answers the purpose. On the other hand, it cannot be denied that fatal effects have followed its inhalation in several instances even when administered by the most judicious hands; that in some cases convulsions have been produced, and in others a great disturbance of the brain causing delirium. In some persons this affection of the mind has continued for several weeks.

There are other objections of a minor character. Chloroform is of an acrid, caustic nature, and if it come in contact with the skin, unless it be protected by some oily substance, severe excoriation is the consequence. Its administration is generally followed by vomiting and headache, which continues for several hours, attended by a great degree of restlessness and want of sleep. Several cases have come under my care, in which the brain and nervous system have been affected to an alarming extent; though in every instance, it was said that a small quantity only of chloroform was administered for the purpose of performing some operation on the teeth.

An individual in this vicinity was thrown into violent convulsions, which continued for three or four days, during all which time she was in a state of complete insensibility, from the inhalation of the vapor of a few drops of chloroform administered by a careful and judicious physician. It would be easy to multiply examples of this kind; but it is not necessary, for there is a stronger ground on which we can rest our opposition to the use of chloroform, that is, its danger to life. This, it is well known, has already been in several instances destroyed by it. If it can be shown that it has caused the death of a single individual, when properly administered, we cannot fail to have our misgivings of the safety of its exhibition, though it may have been inhaled in almost numberless cases without any ill effect.

I am satisfied that there are already on record at least twenty well-authenticated cases of death from the inhalation of chloroform; and I know not how a conscientious man, knowing this fact, can willingly take the responsibility and expose his patient to this fearful result. One of the conclusions to which M. Malgaigne arrives, in his report on chloroform, to the Academy of Medicine of Paris, cannot be too strongly im-

pressed on the minds of those who feel inclined to use it. "Chloroform possesses a toxic action peculiar to itself, which has been taken advantage of in medicine by arresting it at the period of insensibility, which action, however, may, by being too much prolonged, cause immediate death." The danger is that we cannot always know the precise time to arrest it, and that the fatal blow may be struck before we make the attempt. In other words, chloroform is a poison, and the insensibility which it produces is only the first stage of its poisonous action.

3d. *Of Chloric Ether.*

There are two kinds of chloric ether. The one, the strong or concentrated; and the other, the chloric ether of commerce. They are both tinctures of chloroform, differing from each other only in the relative proportions of the alcohol and chloroform of which they are composed. The concentrated consists of one part of chloroform to nine parts of alcohol; and in the chloric ether of commerce, there is one part of chloroform to fifteen of alcohol. The former is the one that is sometimes used for inhalation.

It is said to have been first recommended for this purpose by one of the most eminent surgeons of Great Britain, William Lawrence, Esq., of London; but I cannot learn that it is now employed in Europe to any extent in this way. It fact, it is hardly spoken of at all in the foreign medical journals that I have seen, and I have examined a large number with this view. It has been tried, however, pretty extensively by Dr. J. C. Warren and Dr. J. Mason Warren, both at the Hospital and in private practice, and I am not aware that any ill effects have followed its use. On the contrary, I believe that they are well satisfied with it, and prefer it to the other anæsthetic agents.

At the same time it cannot be denied that it derives its power of producing insensibility from the chloroform it contains; and it is difficult to understand how the addition of alcohol can deprive it of its dangerous properties, when it is well known that the mixture of this substance with sulphuric ether renders it in great measure unfit for inhalation.

The advantages which it is said to possess are, that its odor is less pungent and disagreeable than that of sulphuric ether, and that it can be inhaled with little or no inconvenience. At the same time it must be admitted that it is necessary to use as much chloric as sulphuric ether, and to continue the inhalation for as long a time to produce the desired effect.

The disadvantages are, that when it comes in contact with the unprotected skin it acts upon it in the same manner as chloroform. From this cause a patient suffered several months at the Hospital, and I believe much more severely than if he had undergone the operation without the ether. I am confident, too, that it is more apt to produce vomiting, and a greater disturbance of the brain and nervous system, causing headache, restlessness and vigilance, which not unfrequently continue for many hours after its exhibition. Perhaps these last symptoms may be owing to the great amount of alcohol it contains.

I cannot, I confess, divest myself of the belief that chloric ether is an

unsafe anæsthetic agent, when I consider that it is simply chloroform diluted with alcohol. It is true, that as far as we know, no fatal effects have hitherto followed its inhalation; but it is also true, that it has as yet been used to a very limited extent, and in all the cases in which it has been exhibited that have come to my knowledge, it has been managed with great caution and judgment. But I fear that if it be used with the same freedom that sulphuric ether is, we shall soon have to record some very different results. We cannot feel confident that it will always be confided to skilful hands only, nor by any means certain that death, when not looked for, may not follow its exhibition.

Boston, April 10, 1850.

RUPTURE OF THE ILEUM.

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Mr. H. G., æt. about 40, of medium size and healthy, Sept. 23. 1843, while leading a cow by a rope attached to her head, was thrown forward down hill, falling upon his face, his abdomen striking upon a small stick or stone. He felt injured from the fall, but after resting a short time, walked one mile and a half. Feeling more unwell, he sat down by the road-side near a house. His pain rapidly increased and I was soon called. Saw him at 5, P. M., about two hours after the injury was received. At this time he was suffering from severe lancinating and twisting pain in the abdomen. There was no abrasion or bruise upon the surface, or appearance of hernia. On learning the history of the case from the patient and his friends, I immediately proceeded to adopt the following treatment. Venesection, ʒ xxx. R. Sulph. morph., gr. 1-8, to be repeated every second hour—apply fomentations to abdomen. Saw him again at 9, P. M. Pain unabated. Repeat venesection, ʒ xxxij. Continue the morphine, to be repeated every third hour.

24th, 9, A. M.—Pain somewhat less acute, the patient being considerably under the influence of morphine—pulse wiry and frequent; abdomen tense; skin hot and dry, and all the symptoms of acute peritonitis. Repeat venesection, ʒ xvj. Continue the morphine and the fomentations—give an enema of soap and water to empty the rectum. The latter was repeated several times during the day and the following night, bringing away with each discharge a small quantity of fecal matter.

26th, morning.—The patient being evidently worse, the friends remonstrated, thinking that perhaps a better treatment might be pursued—that a cathartic should be given. I told them that there was probably a rupture of some part of the intestines, and explained the importance of keeping the bowels in as quiet a state as possible, thus affording the patient the only possible chance for recovery. The friends still persisting in their opinion, I asked for counsel. Three very worthy physicians from adjoining towns were called, who prescribed ol. crot. tig. gtt. iij., in starch water, to be repeated every third hour, to give cathartic enema, to be repeated occasionally, and continue fomentations.

Nine drops of oil were given in all, when, same night, the patient died.

The autopsy was conducted by one of the counsel and myself, *post-mortem* 18 hours. No abnormal appearances discovered save in the abdomen, where were found the effects of acute peritonitis. Fecal matter was abundant in the abdomen outside of the intestines. On the median line, about midway from umbilicus to the pubis, was a transverse rupture of the ileum, extending half way around it. Length of the ileum, from the rupture to the ileo-cœcal valve, three feet. J. Doe.

Cabot, Vt., March 29th, 1850.

[The suggestions of our correspondent, Dr. Castle, respecting the importance of accurate scientific evidence in criminal cases, are important, and deserve the consideration of all medical men. His allusions to the witnesses in the Webster trial, however, are in several respects at fault. As to the chemical tests—to say nothing of the eminent qualifications of the experimenters—it might be supposed the prisoner, a most skilful chemist, would, if possible, instruct his counsel how to prove them inaccurate. Of the dentists whose anatomical knowledge he calls in question, all, it is believed, have had a regular medical education, and their proficiency as "anatomical and surgical" dentists is unquestioned here. With regard, also, to the carbonic acid gas, it was from the dissecting vault that Dr. Webster was said to wish to obtain it, and into which Littlefield lowered a light; and not the privy, in which the remains were found. This privy communicates with the tide-water, and when its walls were broken into, the air rushed through the opening and put out the light. If there had been any carbonic acid gas here, the water would have absorbed it.]

FALLIBILITIES OF SCIENTIFIC EVIDENCE IN MEDICAL JURISPRUDENCE.

BY A. C. CASTLE, M.D., NEW YORK.

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The following remarks suggest themselves, arising out of the unhappy misfortune which has overtaken and brought Dr. Webster to take his trial before a jury of his countrymen, for the highest of all crimes—murder. As truth and facts are unquestionably the great *desiderata* to be arrived at in a court of justice, we might fear that they are too often sacrificed upon the altar of scientific incongruities. Feeling the importance, at this moment, of exposing the condition of scientific evidence, we are not unaware of the high ground which we assume, for we have plausible theories to contend with, the trammels and fetters of usage, and the wonderment of the admiring million, who, ignorant upon the chemical branch of natural philosophy, accept the results of scientific researches as the evidences of immutable truths. The fallibilities of scientific evidence is a subject of the highest importance. Not only a single individual or a family, but the community at large, are concerned. If scientific research related to our pleasure only, as chemical experiments are given in a lecture for our edification and amusement, it might be deemed of

little consequence ; but as it relates to life and liberty, it is of the most vital importance to our sublunary affairs. The records of important trials for the last thirty years afford many proofs of the expansive and elastic nature of scientific reasonings, and the philosophy (?) of scientific evidence. Fortunately, however, in these cases, in accordance with those immutable principles of an eternal justice, " murder will out "—but other overwhelming and attainable practical proofs have in an eminent degree been brought to bear and verified science, rather than science has elucidated and verified doubts! The trial of Dr. Webster offers the same ground for argument as its predecessors. We will commence with that essential piece of humbug and superlation, the proving of human blood in contra-distinction to the blood of animals and the periodic discharges of the catamenia in females. One witness in Webster's case states that the microscope is the best, the safest, and the most certain method of detecting human blood. In the case of Robinson's trial for the murder of Suydam (New Jersey), a chemist of high standing swore to a few spots of blood scraped from *new pine boards*, where it had dried and had been for several days. But no evidence was sought for, and none was given, to show what changes the turpentine of the wood had caused, how decomposed, or what effects the pyroligneous fluids had produced on these few spots of " male " human blood. In the case of Colt for the murder of Adams, spots of blood, ten or twelve days after, were scraped from the wall composed of common lime mixed with sulphate of lime. Now every physician knows that in case of emergency —say a person had swallowed oxalic, sulphuric or any other acid—if the patient were made to swallow a portion of lime wall, powdered, the lime would neutralize the acid. Yet we had no proof what changes this alkaline substance had produced on the blood " proved " to be human blood. It is true the microscope was not used. And it is true both these men were proved to be guilty of murder, not by the spots of blood, but by better and overwhelming evidence. Now in the case of Webster, we have, in addition to these wonderful scientific tests, the all-faithful and never-to-be-mistaken microscope. It sees fungi of such infinitesimal particles floating in and filling the atmosphere, that one of them, in comparison with the ultimate dilution of a homœopathic atom, would appear a huge mastodon. No doubt, ere long, we shall be warned of the danger of thinking, as our thoughts will not only be seen, but magnified to an extent that some dreadful disease, ten million times more destructive than the cholera, will be attributed to these imponderable and subtle agents. We saw the famous Dr. Lardner exhibit the " circulation of the blood " in a mosquito, with his powerful hydro-oxygen microscope. We saw, by means of *this* apparatus, a commotion in the belly of this magnified mosquito rhinoceros. It might have been the circulation of the blood (Dr. Lardner said it was), or the Asiatic cholera, or internal twitchings superinduced by mental anxieties; we could never discover which. In the case of Madame Lafarge's trial for the murder of her husband (France), we published similar objections to the modes of testing suspected poisons in the human stomach ; for example, opium, nux vomica, essence of tobacco, arsenic, corrosive sublimate, &c. &c.,

which are often taken with beer, or by beer-drinkers. Now every body knows that this beverage is in many cases adulterated with the most poisonous drugs. Who shall swear to and prove the character of vegetable poisons under such circumstances? Will chemical science do it? Our objections attracted the attention of *Orfila*, the celebrated French toxicologist, who at once perceived the objections as we saw them, and the French press at the time acknowledged their obligations to Orfila for the progress of his research, in the science of toxicology. We have the following poisons in the various adulterated beers:—opium, extract of poppies, nux vomica, tobacco, coculus Indicus, oil of vitriol, copperas, &c. &c. In adulterated champaignes and other wines, sugar of lead and other mineral poisons.

The constitution and laws secure to us trial by a jury of twelve men. Yet we have the conviction of a man on trial for a capital offence resting upon the judgment—yes, we repeat, *resting on the judgment*—of one man, and that judgment dependent perchance, upon an *imperfect* test. What is the grand, the eloquent feature of the Anglo-Saxon race—their chivalrous trait? "*Fair play.*" The prisoner has no chance in such cases, *for who ever heard of a chemist discovering any other poison than that poison which he was directed to search for?* The prisoner can bring no evidence that the tests used were chemically *pure*; and if pure, that the process was conducted in a proper manner. The court awards the prisoner counsel, but no chemist to ascertain the true facts for him.

We have a witness that the skull of Parkman was fractured before death. He states that *such* fractures cannot take place after the bone has been burned. The defence is satisfied with *one* witness to prove that the same thing occurs to a burnt bone. Another witness swears the microscope to be the safest, best, and most certain instrument and method for ascertaining the identity of human blood! (Did he ever examine the whale's or the sturgeon's blood?) No testimony was deemed necessary denying its truth, or its fallacy. No! It is all-sufficient, and it only requires an eminent name to establish a theory for a fact, and to impress the assumption as a truth. The next scientific evidence is that of Dr. Keep. This gentleman stands high as a *mechanical* dentist; but is he an anatomical, medical and surgical dentist as well? Is he well acquainted with the *known* physiological laws governing the animal system, and their action upon the human jaw? It is not enough for a man only to know the superficial face of the flesh of the jaw as represented by a model, to empower him to swear to and identify a block, the *portion only*, without the gold, of a set of teeth, made to a gold plate, as resembling the "*outline*" of the burnt skeleton of the "*side*" of the jaw. To do so requires a proper anatomical education and knowledge. To upset this evidence, *one* dentist, only, is brought forward to prove the contrary; it is true, a talented dentist and a well-educated medical man. Dr. Morton's evidence was professionally correct, with proper incontrovertible truths capable of practical proofs. Yet four or five dentists were thought necessary to rebut Dr. Morton's testimony. Were these gentlemen anatomical surgical dentists? Could they have

undergone an examination upon the physiological, anatomical, and the relative anatomy of the jaws, as well as they did for the identification of a piece of burnt quartz, silex or feldspar? which, if the heat was so intense as partially to melt one part, would have *condensed* and altered the character of the other. By a most singular omission and strange infatuation, the very point wherein science could have been triumphantly made use of and brought into requisition to bear with singular fatality upon Mr. Littlefield's evidence with regard to the sink, was altogether omitted or lost sight of. Dr. Webster, it is stated, said in reply to a question, that he had an "*apparatus*" to obtain the gas from the sink. It is not usual for a chemist to use the word "apparatus" where a simple vessel will answer to dip with, and this gas is procurable by dipping for it, as for water. This carbonic acid gas, as is well known to the *medical* man, is exceedingly heavy, and can be poured from one vessel into another, as water is, although the gas is invisible. As I understand, Mr. Littlefield lowered down into the sink a light, which was immediately extinguished by the gas. Notwithstanding this phenomenon, he digs a hole through the side of the sink, and the draft of air rushes through the aperture with such force (*which way* is not stated) that he could not for some time pass the light through into the sink. If the draft of air came from the sink, his senses as well as the light would have been extinguished by the stifling and suffocating gas; and if the draft of air blew into the sink, the lighter gravity of the atmosphere would not have displaced the heavier gas; and even if a mixture of the two had taken place, the light when passed into the sink would not have burned. Notwithstanding all this, the candle burnt vividly in this hole of non-combustion, sufficiently brilliant to enable him to discover the remains of a human body. How the light was shaded to prevent its brilliancy of light between the optics and the object, making the remote obscurity more invisible, is not stated. A piece of common twine, "which can be sold at eighteen cents per pound," can be sworn to, but the really available portion of science fails, or is lost sight of, or when brought into requisition in nine cases out of ten has proved but a doubtful corroborative at best.

PENCILLINGS FROM ABROAD.

[Communicated for the Boston Medical and Surgical Journal.]

THE *unanimity* of the medical profession is the best possible resistance that can be offered to charlatanism; next to this, for want of special enactment, is the appreciation and reward by the civil authorities, of such distinguished services as may have emanated from an enlarged philanthropy, or have been the result of unusual investigation. Such safeguards, however, do not exist in England. The strife, which for so many months has disgraced the medical and surgical world, respectively represented by the Royal College of Physicians, and the Royal College of Surgeons, still rages with unabated fury. In the mean time the various ultraisms of the day, under cover of the smoke and dust of the allopathic struggle,

insidiously extend the sphere of their baneful influence, and thus assume an importance due neither to the doctrines or their promulgators. The rankest weed of this description is *Homœopathy*. Fattening on the neglect of the only rational mode of treating disease, and the unhappy divisions existing among its natural defenders, here and there scattered over the metropolis may be seen its ephemeral "Institutions," which, according to the statements of the numerous noisy publications issuing thence, are the only legitimate depots of pure medical science. Humiliating thought, that a class of men can be found that will thus coolly impose upon their fellow men; and equally humiliating thought, that the common sense of people should suffer itself to be occluded by so much shameless effrontery and ignorance. However, since Truth, like the water-lily, is in its nature expansive, and daily exhibits more and more of its peerless beauty, we look upon it as certain that, ere many years have elapsed, these excrescences upon the profession will be regarded in the same light as the mummies in our museums are; and the only query will be by what wonderful art they could have been preserved so long! The next in point of number and importance is that idle vagary of the imagination, called *Hydropathy*. This, however, has reached its culminating point and is rapidly on the decline; partly owing to the blighting influence of the mushroom Homœopathy, but more especially to the fact that its converts have ascertained its total inefficiency, and, like Sidney Smith's duck in the *sedtz bad* at Baden, cry out, "quack, quack, quack!"

With regard to medical rewards;—in Paris, the exertions of the profession during the prevalence of the cholera, did not pass unnoticed by the civil powers; honors were conferred upon those who most distinguished themselves in lessening the amount of human suffering, which, if valueless in themselves, were most pleasing acknowledgments of the indebtedness of society at large to the medical profession, as well as incentives to increased activity. In London, where, I venture to say, more unremunerated services were offered, and more self-denying exertion manifested, for the sake of the suffering poor, than in any other part of the world, no intimation has reached the generous practitioner that he will enjoy any other reward than that always attendant upon an act of benevolence. So far as my knowledge extends, the only public demonstration of the kind in England, is the case of Dr. Ayer, of Hull, in which the citizens of Hull testified their gratitude to Dr. A. by the presentation of a handsome, tangible reward. But it is not strange that medical services should be unappreciated without the pale of the profession, when even the most signal discoveries are unappreciated and unrewarded within it. The treatment that Marshall Hall (whose splendid researches relating to the nervous system have linked his name to latest periods with Jenner, Harvey, Hunter, and others) has received from the Royal Society, is enough to congeal all inflowing sympathy, and paralyze the efforts of those who by investigating dare to announce discoveries. The history of his wrongs is doubtless familiar to you and your readers; and it is gratifying to think that with or without the concurrence of the Royal Society, posterity will place the name of Marshall Hall high up in the Temple of Fame.

In Guy's Hospital, the happiest effects continue to follow the administration of the *succus limoni* in acute rheumatism, as recommended by Dr. Rees; its *modus operandi* is said to be the conversion of uric acid, by supplying it with oxygen, into urea; the most obvious effects produced on the system are a diminution both in the frequency and power of the pulse, and an increase in the quantity of solids excreted in the urine. The same remedy has also been applied to purpura with marked success.

As a testimonial of respect to the memory of Liston, four marble busts have been resolved upon; one to be placed in the College of Surgeons, a second in University College, a third to be sent to Edinburgh, and the fourth to be retained in the family. A gold medal is also to be struck off, to be awarded annually by the Council of University College to the best proficient in surgery. Yours, &c.

London, March, 1850. EDW. M. FIELD, M.D.

DR. JACKSON'S REPORT TO THE CORONER'S JURY.

[THE following is the Report, alluded to in last week's Journal, by Dr. Charles T. Jackson, on the articles found in Prof. Webster's furnace.]

List of articles found in the laboratory furnace cinders, delivered to us by the jury of the Coroner's inquest at the Mass. Medical College in Boston, Dec. 1st, 1849. These articles were sorted on Sunday by Drs. Wyman, Ainsworth, and myself, Dr. Gay having been obliged to leave for the day.

Bones found in the cinders from the furnace.—Right os calcis, right astragalus, tibia and fibula phalanges, probably of the middle or ring finger. Coronoid process of lower jaw. Numerous fragments of a skull. A human tooth that had a hole in it as if once filled by dental operation. Three blocks of artificial mineral teeth were also found in the cinders, without the gold plate. A pearl shirt button was found in the ashes and was partially calcined. Numerous little cup-shaped pieces of copper, similar to some seen in one of the laboratory drawers, were also found. Many pieces of glass were mixed with the slags, and pieces of metal were found in and among the cinders.

These various articles were all completely examined, and such as needed chemical analysis were subsequently taken by Dr. Gay and myself, and examined.

The lumps of metal most abundant in the furnace cinders were teachest lead, an alloy of tin and lead, in nearly equal proportions, the tin predominating in the pieces analyzed—tin, 12,19; lead, 11,95. The cinders being pounded and worked, disclosed some small globules of gold, and an alloy of silver and gold. The amount of gold found was small, 30 grs. The amount of silver was small.

After your examination of the human body, committed to you, I made some chemical examinations of the surface which had been dissolved on the chest and one thigh, and found that they had been imbued with a solution of potash. This I determined by chemical analysis, finding potash and a little sea salt. There was an evident corrosion of the surface

of the skin, by the action, probably, of the potash, aided by heat. I found potash in the skin of both the thigh and thorax, and in the muscles at each end of the dissevered thorax, the alkali being very strongly marked. The dark color of the skin which had been acted upon by potash, was, probably, in part colored by the tan, the potash aiding in this coloring. I found no alkali in the interior of the thigh, nor in the flesh of the back beneath the skin.

I observed that the hair on the left side of the thorax had been singed by fire. I noticed that the skin was corroded by potash, and was quite tender near the opening in the skin opposite to the sixth and seventh ribs, and that the edges of this opening appeared to have been corroded by that alkali.

I dissected out portions of the femoral arteries and flesh of both thighs, and the artery and vein of the leg, to examine, to ascertain whether the body had been injected with the fluids used for preserving bodies in the dissecting room. These I gave into the hands of Dr. Martin Gay for analysis, and he has caused an examination of one of these pieces to be made in my laboratory, by Mr. Richard Crossley, who found no traces of zinc or arsenic substances used in the preservation of bodies in the dissecting room.

The spots on the wall, floor and furniture, shown us by the jury and police, were submitted to the examination of Dr. Jeffries Wyman, as were also the spots on a pair of pantaloons and slippers, submitted to our inspection; and his results will probably be reported to you by that gentleman.

The results to which I have arrived are, that portions of a human adult skeleton were found in the cinders and coals submitted to my examination; that tea-chest lead had been thrown into the fire; that the gold found may have been derived from the set of mineral teeth found in the fire; that the silver was in small quantity; that the skin and parts of the thorax of the body you examined had been subjected to the action of potash, and an attempt had been made to burn the thorax in the fire, but had not been persevered in.

These are all the conclusions we are authorized to draw from the premises herein set forth, and from the examinations submitted to the chemical department of your committee. Respectfully submitted,

By your obedient servant, C. T. Jackson.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 10, 1850.

Strictures of the Urethra.—John P. Mettauer, M.D., Prof. of Medicine and Surgery in Randolph Macon College, Virginia, has published a small memoir on "Strictures of the Urethra," which is altogether a sensible, methodical, practical guide in the treatment of a difficult line of practice; but a more miserable specimen of book-printing never emanated near

Mason and Dixon's line. The corporation of Farmville would be justified in purchasing a font of type, to save the reputation of the town. The bad appearance is not all—in a pamphlet of only 45 pages, an errata table exhibits the mortifications to which the author was subjected by this aboriginal attempt at printing. The treatise shows the author to be a cautious, exact and safe practitioner. No haste seems to have been manifested in establishing his personal views, but a conclusive evidence is brought to the eye of the reader of the desire of Dr. Mettauer to contribute the results of his experience in managing a formidable and distressing disease. Under the headings *bridle stricture*, engorgement of the capillaries, lesions, dilatations behind the stricture, rupture behind the stricture, infiltrations of urine, lesions of the prepuce and glans, lesions of the testes, of the prostate, of the bladder, ureters, kidneys, &c., no one has concentrated more important facts for a medical practitioner. We sincerely hope Dr. Mettauer will both revise and enlarge his researches, with colored illustrations, publish them in Philadelphia, in a commanding form, and he may rely upon finding himself one of the standard medical authorities of the country.

New York State Lunatic Asylum.—Men disappear, but institutions remain the same from one generation to another. Over this collossal establishment, the late Dr. Brigham presided, from its opening; and through his efforts, philanthropy and personal reputation, the name of the Utica Asylum was wafted over the civilized globe. Before danger was apprehended by his friends abroad, the melancholy intelligence came that he had been forever removed by the insidious underminings of disease from the scenes of his usefulness and activity. The present annual report to the Legislature, by his successor, exhibits the general prosperity, financially and otherwise, of the Asylum. For 1849, the receipts were $73,166 47; outgoes less, leaving $10,494 38 in the treasury. At the close of 1848, there remained 495 patients; and in 1849, 362 were admitted. Discharged, recovered, 203; improved, 66; unimproved, 70; died, 69. In the year, 857 were under treatment—of whom, 433 were males and 424 were females. George Cook, M.D., had the temporary superintendence of the Asylum when this document was presented.

New Jersey Lunatic Asylum.—An engraved view attached to the cover of the report, shows that a very elegant edifice was created by the State. If any convenience is wanting, after examining the ground plan, it would require an architectural critic to ascertain where. Receipts for 1849, $44,409 58. Outgoes less by $130 58—an indication of a commendable ecomomy. Within 1849, there were 179 patients under treatment. Discharged cured, 44; improved, 14; unimproved, 2; died, 9. January 1, 1850, 110 were under medical supervision. H. A. Buttolph, M.D., is the Superintendent; and from a perusal of the document before us, we feel convinced of his watchfulness, humanity and medical and moral qualifications for the distinguished position in which the people of New Jersey have placed him. A redeeming feature in the legislation of that little spirited, peach-growing Commonwealth, is noticeable in the repeal of an obnoxious law that authorized county treasurers to recover from townships or cities, for the expense of maintaining lunatics sent to the Asylum.

Dietetical and Medical Hydrology.—Opinions change nearly as rapidly as the fashion of garments. That which is an absurdity one day, presented under a modifying aspect is orthodox in medical philosophy the next. The people are not influenced as they formerly were, by the movements of a few leading spirits, but each one actually thinks pretty much as he chooses, and in respect to medical men, show but little or no regard for them, should their notions on matters of medicine not tally very nearly with their own. Since our remembrance, a physician's advice was properly estimated: now, if it does not coincide precisely with the radicalism of the day, when old women and children manifest equal pertinacity if health or remedies are the topics of family discussion, the doctor is looked upon as a stiff-necked, unyielding curmudgeon, who sets his face as strongly against improvement in therapeutics as the Chinese government would oppose the doctrines of republicanism.

We have a work before us of rare historical and medical interest, by one of the best men in the professional ranks. It is "A treatise on baths, including cold, sea, warm, hot, vapor, gas and mud baths; also on the watery regimen, hydropathy and pulmonary inhalation, with a description of bathing in ancient and modern times. By John Bell, M.D., &c. &c., Philadelphia." After a deliberate examination of Dr. Bell's collection of facts, the reader will admit that he has ransacked the world for this book of evidence, leaving each to determine for himself whether its tendency is to favor the new isms or controvert any of them. Wherever Dr. Bell gives his own views, they command attention, and we fully believe he has contributed important service to the progress of medical literature and science. We are unwilling to omit this opportunity of paying a tribute of respect to the untiring industry of Dr. Bell, whose active mind appears to have no relaxation, but is directed with extreme logical activity to the consideration of the question, what will best promote the health and happiness of the human race. Perhaps there is not another city on the Continent that embraces so many writers on medicine and its collateral branches, as Philadelphia. They certainly are now in the ascendant; yet Boston, New York, Baltimore, Cincinnati and many other cities, abound with very distinguished physicians and surgeons, but who seem not to keep in recollection that he who writes his thoughts, with a few exceptions, has a hold upon succeeding generations, while those who carry their acquirements to the grave, leaving no memorial of the space they occupied in society, are never long remembered beyond the settlement of their estates. It is lamentable, exceedingly so, that those enjoying rare opportunities for gathering up physiological, surgical, obstetrical and general medical information, do not exert themselves to make it of utility to others. Philadelphia may well be proud of a body of medical authors, who are giving increasing indications of their energy, competency and industry in raising the standard of medical literature and character in the United States.

Intellectual Philosophy.—An elementary treatise on the profound subject of intellectual philosophy, by the Rev. Hubbard Winslow, of Boston, will soon be ready for the public. It surpasses, in many respects, the heavy works that have long been known, from the circumstance that the manner of illustrating propositions is not only natural, but highly curious and instructive. Although designed mainly for a text-book, and for private reading, the fact is apparent that it will become exceedingly popular

with scholars, especially those who have a love for physiological investigation. There are thirty-seven chapters, making a volume of 414 pages. Life, difference between men and animals, instinct, nature of the human mind, immortality of the human mind, origin of human knowledge, &c., are specimens of reasoning and elegance of diction, that cannot fail, we apprehend, of affording a vast amount of intellectual pleasure, nowhere else to be found, among native authors certainly. To our medical friends, particularly, we recommend this modest, but excellent book, which is calculated to discipline the mind, open great truths for contemplation, and enrich the understanding.

Mass. Medical College.—Since the trial and conviction of Dr. Webster, much curiosity has been exhibited on the part of our citizens to visit the college, in which it is supposed the tragedy took place. To gratify the public, the faculty threw open the doors of the College last week, that *all* who had a wish, might view the premises. On the second day of its opening, over 5000 persons had visited it. The interest that has been taken in this melancholy affair is entirely unprecedented in the annals of jurisprudence. It is said that upwards of 60,000 persons attended the trial and had a view of the prisoner.

Laryngeal Shower Syringe.—This is an instrument brought into notice by Dr. Ira Warren, for the topical medication of the throat and air-passages. Not having seen the instrument in question, we are not fully able to judge of its merits. Dr. Geo. Bartlett, of this city, published a paper in the Journal a short time since, upon the same subject, wherein it was stated he used, for the same object, an instrument termed a pneumatic spatula. A paper from Dr. W. has also been received, but from the press of other matter its publication is deferred for the present.

Imperforate Anus.—A curious and interesting case of this deviation from nature, lately occurred in a male child, in the practice of a physician of this city. When two days old, it was operated upon successfully, and for 15 months continued well, or as much so as children of that age usually are, when it was discovered that fecal matter escaped from the urethra. From that time to the day of its death, 13 months, there was no passage of fecal matter through the anus, it passing off with the urine in its new formed channel. A post-mortem examination having been made, we have been promised a full report of the case, which will be given in an early number.

Suffolk Medical District Society.—At the annual meeting of this society, held at their rooms on the afternoon of the 3d inst., the officers of the last year were unanimously re-elected, as follows, viz.—Dr. John Jeffries, *President.* Dr. Sam'l Cabot, *Vice President.* Dr. E. W. Blake, *Secretary.* Dr. Chas. Gordon, *Treasurer.* Dr. Wm. E. Coale, *Librarian.* Drs. Z. B. Adams and N. B. Shurtleff, *Supervisors.*

Adulteration of Drugs.—Notwithstanding the general government has appointed in our principal ports, inspectors of drugs, yet we still find those that are adulterated in the market. To prevent this evil, the Suffolk

Medical District Society have taken the subject under consideration. At their last meeting a committee was appointed to look after those who knowingly practise such deceptions. This committee consists of Drs. Jacob Bigelow, Geo. Stevens Jones, A. A. Gould, John Bacon, Jr. and E. H. Clarke.

Surgical Anatomy—By Joseph Maclise, Surgeon, published by Lea & Blanchard, Philadelphia. Part two of this splendid work has just been received from the publishers. The illustrations are life-like, and will serve to assist the memory of those who make that part of medicine their study. It is the very best work on surgical anatomy that has been published in this country, and it is hoped that the enterprising publishers will be fully remunerated for the expense of so valuable a production.

Medical Miscellany.—A Mrs. Margaret Higley recently diéd at South Canaan, Conn., at the age of 102 years, 4 months and 5 days.—Another copy of M. Jacoby's lecture on the treatment and preservation of the hair, has been received.—A Dr. Stevens, at the East, detected in a series of larcenies, became very sick after arrest, but recovered so rapidly as to escape by a leap from a window, leaving his watchers in wonder.—The reward of $3000, offered in November last, for the discovery of the body of the late Dr. Geo. Parkman, was paid on Saturday to Mr. Littlefield, the janitor of the Medical College.—Stimson's News-letter sheet, No. 12, contains all that is important regarding the trial of Dr. Webster.—Dr. Trowbridge, of Watertown, N. Y., has lately performed his tenth operation of bronchotomy, for the removal of foreign bodies, and all of them have been successful.—Liebig, the great chemist, was so dull in college that he was called the "booby" of his class. "Bright" students don't always make the most brilliant men.—A bill has been presented in the Mississippi legislature, requiring physicians to write their prescriptions in English instead of Latin. Dr. John Ware, of this city, made a motion to the same effect at the last meeting of the American Medical Association.—There were 30 suicides committed in the United States during the month of February.—Dr. E. A. Mitchuson has been tried for the seduction of a Mrs. Guthrie, and also for the attempt to poison her husband, at Shelbyville, Ky.—and on both charges acquitted. The populace were so excited at the result that they burnt him in effigy.

To CORRESPONDENTS.—In addition to papers previously acknowledged, others have been received from Dr. Edw. Jarvis, Prof. M. L. Knapp, Dr. A. Trowbridge, Dr. A. J. Skilton, Dr. J. H. Dix, and "Esculapius, Jr."

MARRIED,—In New York, Henry W. Bell, M.D., to Mrs. H. Parmele.

DIED,—In Plainfield, Conn., Dr. Wm. H. Campbell, 52.—Dr. Rial Wright, of Syracuse, N.Y., killed on board a steamboat.—In Mendon, Illinois, Dr. Calvin Brown, of Marlow, N. H.—At New Orleans, Dr. George Eickhorn, a native of Germany.—At Hasting, Westchester Co., Penn., Dr. Joseph Dobias, 47.—At Bangor, Me., Spencer Pratt, M.D., 77.

Deaths in Boston—for the week ending Saturday noon, April 6th, 56.—Males, 33—females, 23. Accidental, 1—disease of the bowels, 1—inflammation of the bowels, 2—bronchitis, 1—consumption, 9—convulsions, 2—cancer, 1—cramp in stomach, 1—croup, 1—diarrhœa, 1—dropsy, 2—dropsy of brain, 4—erysipelas, 3—typhus fever, 1—scarlet fever, 1—lung fever, 3—hooping cough, 1—disease of the heart, 1—infantile diseases, 2—inflammation of the lungs, 2—marasmus, 1—old age, 1—palsy, 1—quinsy, 1—smallpox, 5—suicide, 1—teething, 3—ulcers, 1—unknown, 2.

Under 5 years, 25—between 5 and 20 years, 5—between 20 and 40 years, 15—between 40 and 60 years, 7—over 60 years, 4. Americans, 29; foreigners and children of foreigners, 27.

Delegates to the Convention for Revising the National Pharmacopœia.—The following names should be added to the list published in the last number of the Journal:—From "the Rhode Island Medical Society," Joseph Mauran, M.D. From "the Wisconsin State Medical Faculty," George D. Wilbur, M.D. From "the Medical Society of Delaware," Drs. J. N. Jump, J. D. Perkins, and J. W. Thomson.

Registration in Rhode Island.—We are pleased to learn that a bill has passed the Rhode Island Legislature, requiring a general registration of births, marriages and deaths, to go into effect the 1st of next June. The following extract from a Providence paper shows that the Legislature were not above listening to the advice of the medical profession in the matter. —"Dr. Mauran, by invitation, made a very able and interesting address to each House of the General Assembly, upon the bill for the registration of births, marriages and deaths. His remarks were listened to with great attention, and produced an evident effect in favor of the bill. Very interesting results may be anticipated from this system of registration, if it can be thoroughly carried out, and we suppose that the medical profession will attend to this."

The late Dr. Fisher.—At a meeting of the Suffolk District Medical Society, held at their rooms on Saturday evening, the 30th ult., the following resolution was offered by Dr. Gordon, and unanimously adopted.

Resolved, That by the death of Dr. JOHN D. FISHER, we painfully realize the loss of one of the most valuable members of our profession, distinguished for his zealous and truthful study of medical science, and for his highly courteous and generously disinterested deportment in his professional and social relations with his fellows.

The Secretary was instructed to communicate to the friends of the deceased, a copy of the foregoing resolution.

Army Medical Board.—On the 15th of May, a Board of Army Surgeons will be convened at New York, for the purpose of examining those applicants who are desirous of becoming members of the Medical Staff. Generally, the catalogue of names is discouragingly large. Government seems never to have had a large body of surgeons, and perhaps there is a good and substantial reason for it. The army is small, and the soldiers, instead of being concentrated at a point, are distributed among the fortresses of an extensive country. A surgeon can hardly be supposed necessary for each little group. When the offices of a surgeon are required, practitioners of the neighborhood are employed, temporarily, and thus the army surgeons are few in number. It may be excellent economy to keep the number down; but if it could be contrived so that a thousand or two expectants could be put upon regular pay and rations, it would encourage them, relieve their friends, and open a market for a multitude of rival medical schools!

The Cholera at Tunis—Is at this moment committing great ravages, especially among the Jews, of whom, up to Jan. 18, from 25 to 30 had died daily. The Bey has, at his own cost, undertaken every means of arresting this scourge, and of alleviating the general distress, by food, medicine, &c.